

Please add new claims 9-22 as follows:

6 ~~10~~. The semiconductor laser device of claim 1, further comprising a second optical guide layer is disposed between a lower one of said pair of cladding layers and said quantum well active layer.

7 ~~10~~. The semiconductor laser device of claim ~~9~~⁶, further comprising a buffer layer below said lower one of said pair of cladding layers.

ad 11. The semiconductor laser device of claim 1, wherein said optical guide layer has a thickness of 30nm or 35nm.

8 ~~12~~. The semiconductor laser device of claim ~~1~~¹, wherein said quantum well active layer comprises an undoped multi-quantum well layer having two to four well layers alternating with optical barrier layers.

9 ~~13~~. The semiconductor laser device of claim ~~12~~⁸, wherein each of said well layers has a thickness of 8nm and each of said optical barrier layers have a thickness of 5nm.

10 ~~14~~. The semiconductor laser device of claim ~~12~~⁸, wherein each of said well layers has a thickness of 7nm and each of said optical barrier layers have a thickness of 8nm.

11 15, 8 The semiconductor laser device of claim 12, wherein
each of said well layers has a thickness of 7nm and each of said optical barrier layers
have a thickness of 20nm.

a2 16. The method of manufacturing a semiconductor laser device of claim 6, further
comprising
processing said p-type doped cladding layer into a stripe-shaped ridge;
forming a SiO₂ film on upper and side surfaces of the ridge;
removing the SiO₂ film on the upper surface of the ridge; and
forming an electrode on the upper surface of the ridge.

Sub 3A 17. The method of manufacturing a semiconductor laser device of claim 15, wherein
said stripe-shaped ridge has a width of 2 - 3 μm .

18. The method of manufacturing a semiconductor laser device of claim 6, further
comprising
processing said p-type doped cladding layer and said p-type doped cap layer into a
stripe-shaped ridge; and
forming by a MOCVD method an n-type current block layer, such that said ridge
consisting of the p-type doped cap layer and the p-type doped cladding layer are
embedded.

19. The method of manufacturing a semiconductor laser device of claim 17, wherein said stripe-shaped ridge has a width of 4 - 5 μm .

20. The method of manufacturing a semiconductor laser device of claim 17, wherein said step of forming an n-type current block layer comprises forming an n-type electric current block layer and said n-type current block layer.

a2 21. The method of manufacturing a semiconductor laser device of claim 19, wherein said stripe-shaped ridge has a width of 2 - 2.5 μm .

12 22. A semiconductor laser device having a quantum well active layer disposed between a pair of cladding layers, and an optical guide layer disposed between at least one of the cladding layers and the quantum well active layer,

wherein said spacer layer is formed between said optical guide layer and a p-type cladding layer, and

wherein said spacer layer has a p-type electrical conductivity, and a carrier concentration at an interface between said spacer layer and said optical guide layer is more than $5 \times 10^{16} \text{ cm}^{-3}$ and less than $5 \times 10^{17} \text{ cm}^{-3}$.--

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